

REMARKS

Claims 1-7 and 9-21 are pending in this application. Claims 1-7 and 9-21 stand rejected. No new matter has been added. It is respectfully submitted that the pending claims define allowable subject matter.

The drawings, specifically Figures 3-11 are objected to as being virtually impossible to differentiate what is being disclosed. The Office Action states that the images look identical and the lead lines are not clear. Applicant submits that the gray scale images show an imaged object from different planes that are, for example, orthogonal planes for a particular standardized plane. The specification sets forth that the image is of the object being displayed. Applicant respectfully submits that the different views of the particular object (e.g. organ) would be recognized by one of ordinary skill in the art. Accordingly, Applicant respectfully requests the Office withdraw the objection to the drawings. However, Applicant respectfully requests that if this rejection is maintained, that the Examiner contact the undersigned to discuss the continued rejection of the drawings.

Claims 2-7, 10, 14 and 15 have again been objected to for failing to further limit the computer program product and appear to be directed toward the intended use of the product. Applicant respectfully traverses this objection. For example, acquiring ultrasound image data for at least a portion of a fetal heart as recited in claim 2, does further limit the claim to the structure of a fetal heart. This limitation is not an intended use. Moreover, reciting particular structures of an imaged object and the equipment used are structural limitations. Thus, Applicant submits that the objections to claims 2-7, 10, 14 and 15 should be withdrawn.

Claims 1-7, 9-15 and 18-21 have been rejected under 35 U.S.C. § 101 as being directed to non-statutory subject matter. Applicants have amended claim 1 to recite “a tangible and non-transitory computer readable medium.” Accordingly, Applicant submits that the 35 U.S.C. § 101 rejections should be withdrawn.

Claims 6 and 18-20 have been rejected under 35 U.S.C. § 112, second paragraph as being indefinite. Claim 6 has been amended to clarify that the reference plane is of a bi-parental diameter. Additionally, claim 18 has been amended to provide proper antecedent basis and claim 19 has been amended to depend from claim 18. Further, claim 20 has been amended to remove the recitation of “not pre-set”. Accordingly, Applicant submits that the 35 U.S.C. § 112 rejections should be withdrawn.

Claims 1-7 and 9-21 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-6 and 18-20 of co-pending Application No. 11/089,040. Applicant notes the provisional rejection and traverses the rejection. Moreover, Applicant will respond accordingly when the rejection is no longer provisional (and the Office provides a specific non-provisional rejection) or the rejection is the only remaining rejection in the application.

Claims 1, 7 and 14-17 have been rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 6,174,285 (Clark). Claims 1, 7 and 14-20 have been rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 6,669,641 (Poland). Claims 2-4 and 18-21 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Clark in view of NPL “Sonography of the Normal Fetal Heart: A Practical Approach” (Frates). Claims 2-6 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Poland in view of U.S. Patent 6,585,647 (Winder). Claims 5, 12 and 13 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Clark in view of U.S. Patent 7,244,233 (Krantz). Claims 9-11 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Clark in view of U.S. Patent No. 6,290,648 (Kamiyama et al.), hereafter Kamiyama in further view of Applicants Admission of the prior art. Claims 9-11 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Poland in view of Kamiyama. Claims 12 and 13 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Clark in view of U.S. Patent No. 5,454,371 (Fenster et al.), hereafter Fenster. Claims 12 and 13 have been rejected under 35 U.S.C. § 103(a) as being

unpatentable over Poland in view of Fenster. Applicant respectfully traverses these rejections for at least the reasons set forth below.

Independent claim 1, as amended, recites a computer program product residing on a tangible and non-transitory computer readable medium, for use in a medical-imaging environment, the computer program product comprising instructions for enabling a computer to, among other things “generate and define at least one other plane with respect to a reference plane for the body organ based on body organ specific data including spatial positions within the organ that defines a relationship of the at least one other plane to the reference plane, the at least one other plane being a standardized plane.” Independent claim 16, as amended, recites a method including, among other elements “generating and defining at least one other plane with respect to a reference plane for the body organ using a spatial mathematical relationship of the at least one other plane to the reference plane for the body organ based on spatial positions within the organ.” Independent claim 17, as amended, recites a system including, among other elements “a processor for processing the ultrasound image data to define a reference plane for the body organ and to generate and define at least one other plane with respect to the reference plane using a spatial mathematical relationship of the at least one other plane to the reference plane for the body organ based on spatial positions within the organ.” Applicant submits that the cited references, and in particular the Clark and Poland references fail to teach or suggest such claimed invention recited in claims 1, 16 and 17.

Independent claim 1 has been amended to recite body organ specific data including spatial positions within the organ that defines a relationship of the at least one other plane to the reference plane, with the at least one other plane being a standardized plane. Independent claims 16 and 17 have been amended to recite a spatial mathematical relationship of the at least one other plane to the reference plane for the body organ based on spatial positions within the organ. The claimed spatial positions for generating the at least one other plane are not disclosed in the cited references.

In particular, the Clark reference uses different scan parameters to generate images of a particular anatomical region based on a user selected pre-set view. Scan parameters are not the same as spatial positions within or for a particular organ. The Poland reference uses the geometric relationship of slices to each other to generate different images. Geometric relationships between planes are not the same as spatial positions within or for a particular organ. Neither of these references teaches using spatial position information within or for a particular organ to generate additional planes. Accordingly, Applicant submits that independent claims 1, 16 and 17 are allowable.

Additionally, Applicant submits that the application as filed clearly describes standardized planes, for example, for particular organs as described in paragraphs 0053-0059.

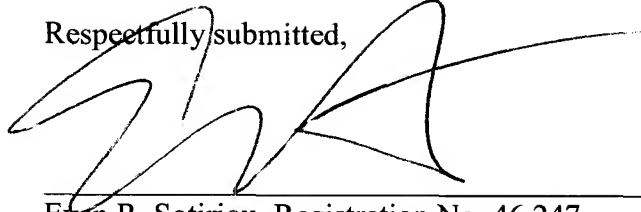
Turning to the dependent claims, Applicant submits that dependent claims 2-7, 9-15 and 18-21 recite further subject matter that is not anticipated or rendered obvious by the cited references. Additionally, claims 2-7, 9-15 and 18-21 depend from claim 1. Consequently, because claim 1 defines allowable subject matter, claims 2-7, 9-15 and 18-21 also define allowable subject matter.

Furthermore, there may be additional reasons other than those described herein or herebefore that claims 1-7 and 9-21 are each patentable over the cited references. Without waiver of such additional reasons, Applicant reserves the right to argue such reasons hereafter.

In view of the foregoing amendments and remarks, it is respectfully submitted that the cited references neither anticipate nor render obvious the claimed invention and the pending claims in this application are believed to be in condition for allowance. Reconsideration and favorable action is respectfully solicited. Should anything remain in order to place the present application in condition for allowance, the Examiner is kindly invited to contact the undersigned at the telephone number listed below.

PATENT
229436-1 (553-1371US2)

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'E. Sotiriou', written over a horizontal line.

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